

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. A proportional control system for use in an HVAC unit within a ventilation  
5 system comprising:
  - a) a processing means programmed with an air exchange – defrost cycle;
  - b) one or more motor speed sensing means positioned in the HVAC unit and  
10 operatively connected to the processing means; and
  - c) one or more temperature sensing means positioned in the HVAC unit and  
operatively connected to the processing means
- 15 wherein the temperature and motor speed sensors determine the motor speed to be  
applied during the defrost cycle.
2. The proportional control system of claim 1 wherein a first temperature sensing  
means is positioned the fresh air inlet intake of the HVAC unit.
- 20 3. The proportional control system of claim 1 wherein a first speed sensing means is  
positioned on the fresh air intake impeller.
4. The proportional control system of claim 1 wherein a second sensing means is  
25 positioned in the stale air intake of the HVAC unit.
5. The proportional control system of claim 1 wherein a damper mechanism is  
installed in the air inlet intake of an HVAC unit.
- 30 6. A proportional control system for use in an HVAC unit within a ventilation  
system comprising:

- a) a processing means programmed with an air exchange-defrost cycle;
- b) one or more sensing means positioned in the HVAC unit and operatively connected to the processing means; and

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- c) a damper mechanism positioned in the HVAC unit;

wherein the temperature sensing means determine the motor speed to be applied during the defrost cycle.

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- 7. The proportional control system of claim 6 wherein a first temperature sensing means is positioned in the air inlet intake of the HVAC unit.
- 8. The proportional control system of claim 6 wherein a motor speed sensor is

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- incorporated within the processing means.
- 9. The proportional control system of claim 6 wherein a damper mechanism is installed in the air inlet intake of an HVAC unit.